

**AMENDMENTS TO THE CLAIMS**

Claims previously submitted:

1. (Canceled) A gasoline additive for reducing a pollutant emission, the additive comprising: a plant oil extract; an antioxidant; and a thermal stabilizer.
2. (Canceled) The gasoline additive of claim 1, wherein the plant oil extract comprises an oil extract of a plant of the Leguminosae family.
3. (Canceled) The gasoline additive of claim 1, wherein the plant oil extract is selected from the group consisting of oil extract of vetch and oil extract of barley.
4. (Canceled) The gasoline additive of claim 1, wherein the plant oil extract comprises chlorophyll.
5. (Canceled) The gasoline additive of claim 1, wherein the antioxidant comprises  $\beta$ -carotene.
6. (Canceled) The gasoline additive of claim 1, wherein the thermal stabilizer comprises jojoba oil.
7. (Canceled) The gasoline additive of claim 1, wherein the thermal stabilizer comprises an ester of a C20-C22 straight chain monounsaturated carboxylic acid.
8. (Canceled) The gasoline additive of claim 1, wherein the plant oil extract comprises oil extract of vetch, wherein the antioxidant comprises  $\beta$ -carotene, and wherein the thermal stabilizer comprises jojoba oil.
9. (Canceled) The gasoline additive of claim 1, further comprising a diluent.

10. (Canceled) The gasoline additive of claim 9, wherein the diluent is selected from the group consisting of toluene, gasoline additive, gasoline, jet fuel, and mixtures thereof.
11. (Canceled) The gasoline additive of claim 1, further comprising an oxygenate.
12. (Canceled) The gasoline additive of claim 11, wherein the oxygenate is selected from the group consisting of methanol, ethanol, methyl tertiary butyl ether, ethyl tertiary butyl ether, and tertiary amyl methyl ether, and mixtures thereof.
13. (Canceled) The gasoline additive of claim 1, further comprising at least one additional additive selected from the group consisting of cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, antiwear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, and mixtures thereof.
14. (Canceled) The jet fuel of claim 13, wherein a ratio of grams of plant oil extract of vetch to grams of  $\beta$ -carotene in the jet fuel is from about 50:1 to about 1:0.05, wherein a ratio of grams of oil extract of vetch to milliliters jojoba oil in the jet fuel is from about 12:1 to about 1:0.05, and wherein a ratio of milliliters jojoba oil to grams of  $\beta$ -carotene in the jet fuel is from about 12: 1 to about 1:0.5.
15. (Canceled) The jet fuel of claim 13, wherein a ratio of grams of plant oil extract of vetch to grams of  $\beta$ -carotene in the jet fuel is from about 24:1 to about 1:0.1, wherein a ratio of grams of oil extract of vetch to milliliters jojoba oil in the jet fuel is from about

6:1 to about 1:0.1, and wherein a ratio of milliliters jojoba oil to grams of  $\beta$ -carotene in the jet fuel is from about 6:1 to about 1:1.

16. (Canceled) The jet fuel of claim 13, comprising from about 0.0013 g to about 0.023 g oil extract of vetch per 3785 ml jet fuel, from about 0.00053 g to about 0.021 g  $\beta$ -carotene per 3785 ml jet fuel, and from about 0.0018 ml to about 0.022 ml jojoba oil per 3785 ml jet fuel.
17. (Canceled) A jet fuel, the jet fuel comprising a base fuel and an additive for increasing smoke point of the jet fuel, the additive comprising  $\beta$ -carotene.
18. (Canceled) The jet fuel of claim 17, further comprising at least one additional additive selected from the group consisting of detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, antiwear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, thermal stability improvers, and mixtures thereof.
19. (Canceled) The jet fuel of claim 17, further comprising a plant oil extract.
20. (Canceled) The jet fuel of claim 17, further comprising a thermal stabilizer.
21. (Canceled) The jet fuel of claim 17, further comprising a plant oil extract and a thermal stabilizer.
22. (Canceled) The jet fuel of claim 19, wherein the plant oil extract comprises an oil extract of a plant of the Leguminosae family.

23. (Canceled) The jet fuel of claim 19, wherein the plant oil extract is selected from the group consisting of oil extract of vetch and oil extract of barley.
24. (Canceled) The jet fuel of claim 19, wherein the plant oil extract comprises chlorophyll.
25. (Canceled) The jet fuel of claim 19, wherein the thermal stabilizer comprises jojoba oil.
26. (Canceled) The jet fuel of claim 19, wherein the thermal stabilizer comprises an ester of a C20-C22 straight chain monounsaturated carboxylic acid.
27. (Canceled) The jet fuel of claim 21, wherein the plant oil extract comprises oil extract of vetch and the thermal stabilizer comprises jojoba oil.
28. (Canceled) The jet fuel of claim 17, comprising from about 0.0010 g to about 0.01 g of  $\beta$ -carotene per 3785 ml of jet fuel.
29. (Previously presented) A gasoline additive comprising
  - a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
30. (Previously presented) The additive of claim 29, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.

31. (Previously presented) The additive of claim 29 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
32. (Previously presented) The additive of claim 29, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof
33. (Previously presented) The additive of claim 29 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
34. (Previously presented) The additive of claim 29 wherein the thermal stabilizer is meadowfoam oil.
35. (Previously presented) The additive of claim 29 further comprising a diluent.
36. (Amended) The additive of claim 29 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, gasoline, jet fuel, gasoline, 2 cycle oil, resid fuel and mixtures thereof.
37. (Previously presented) The additive of claim 29 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
38. (Amended) A gasoline additive comprising:  
  
a hydrophobic plant oil extract;

a carotenoid; and

a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.

39. (Previously presented) The additive of claim 38 wherein the plant oil extract is derived from a member of the Leguminosae family.
40. (Previously presented) The additive of claim 38 wherein the plant oil extract is derived from grain.
41. (Previously presented) The additive of claim 38 further comprising a diluent.
42. (Amended) The additive of claim 38 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, gasoline, jet fuel, gasoline, 2 cycle oil, resid fuel and mixtures thereof.
43. (Previously presented) The additive of claim 38 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
44. (Previously presented) The additive of claim 38, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.

45. (Previously presented) The additive of claim 38 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
46. (Previously presented) The additive of claim 38 further comprising meadowfoam oil.
47. (Previously presented) A gasoline additive comprising;  
  
a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;  
  
a carotenoid; and  
  
a thermal stabilizer.
48. (Previously presented) The additive of claim 47 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
49. (Previously presented) The additive of claim 47, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof
50. (Previously presented) The additive of claim 47 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
51. (Previously presented) The additive of claim 47 wherein the thermal stabilizer is meadowfoam oil.
52. (Previously presented) The additive of claim 47 further comprising a diluent.
53. (Amended) The additive of claim 47 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes,

gasoline, jet fuel, gasoline, 2 cycle oil, resid fuel and mixtures thereof.

54. (Previously presented) The additive of claim 47 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
55. (Canceled) The additive of claim 47 wherein the plant oil extract is barley oil extract, and the carotenoid is  $\beta$ -carotene.
56. (Previously presented) A gasoline comprising a base fuel and at least one additive wherein the additive comprises:
- a plant oil extract derived from grain;
  - a carotenoid; and
  - a thermal stabilizer.
57. (Previously presented) The gasoline of claim 56, wherein the grain is selected from the group consisting of fescue, clover, wheat, barley, oats, rye, sorghum, flax, triticale, rice, corn, spelt, millet, amaranth, buckwheat, quinoa, kamut and teff.
58. (Previously presented) The gasoline of claim 55 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.



59. (Previously presented) The gasoline of claim 56, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof.
60. (Previously presented) The gasoline of claim 56 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
61. (Previously presented) The gasoline of claim 56 wherein the thermal stabilizer is meadowfoam oil.
62. (Previously presented) The gasoline of claim 56 further comprising a diluent.
63. (Previously presented) The gasoline of claim 56 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, gasoline, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.
64. (Previously presented) The gasoline of claim 56 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
65. (Canceled) The gasoline of claim 56 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.
66. (Amended) A gasoline comprising a base fuel and at least one additive wherein the additive comprises:

a hydrophobic plant oil extract;

a carotenoid; and

a thermal stabilizer selected from the group consisting of peanut oil, cottonseed oil, rape seed oil, macadamia oil, avocado oil, palm oil, palm kernel oil, meadowfoam oil and mixtures thereof.

67. (Previously presented) The gasoline of claim 66 wherein the plant oil extract is derived from a member of the Leguminosae family.
68. (Previously presented) The gasoline of claim 66 wherein the plant oil extract is derived from grain.
69. (Previously presented) The gasoline of claim 66 further comprising a diluent.
70. (Previously presented) The gasoline of claim 66 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, gasoline, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.
71. (Previously presented) The gasoline of claim 66 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
72. (Previously presented) The gasoline of claim 66, wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.

73. (Previously presented) The gasoline of claim 66 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.
74. (Amended) A gasoline comprising a base feed and at least one additive wherein the additive comprises:
- a plant oil extract selected from the group consisting of hops oil extract, fescue oil extract, barley oil extract, green clover oil extract, wheat oil extract and mixtures thereof;
- a carotenoid; and
- a thermal stabilizer.
75. (Previously presented) The gasoline of claim 74 wherein the carotenoid is selected from the group consisting of  $\beta$ -carotene,  $\alpha$ -carotene, lycopene, leutin, betatene and mixtures thereof.
76. (Previously presented) The gasoline of claim 74, wherein the thermal stabilizer is selected from the group consisting of vegetable oils, nut oils, animal oils and mixtures thereof
77. (Previously presented) The gasoline of claim 74 wherein the plant oil extract is derived from barley and the carotenoid is  $\beta$ -carotene.
78. (Previously presented) The gasoline of claim 74 wherein the thermal stabilizer is meadowfoam oil.
79. (Previously presented) The gasoline of claim 74 further comprising a diluent.
80. (Previously presented) The gasoline of claim 74 further comprising a solvent selected from the group consisting of toluene, benzene, o-xylene, m-xylene, p-xylene, cyclohexanes, hexane, octanes, nonanes, gasoline, jet fuel, gasoline, 2 cycle oil and resid fuel and mixtures thereof.

81. (Previously presented) The gasoline of claim 80 further comprising at least one additive selected from the group selected from octane improvers, cetane improvers, detergents, corrosion inhibitors, metal deactivators, ignition accelerators, dispersants, anti-knock additives, anti-run-on additives, anti-pre-ignition additives, anti-misfire additives, anti-wear additives, antioxidants, demulsifiers, carrier fluids, solvents, fuel economy additives, emission reduction additives, lubricity improvers, oxygenates and mixtures thereof.
82. (Canceled) The gasoline of claim 74 wherein the plant oil extract is barley oil extract, the carotenoid is  $\beta$ -carotene.